7900104

No.

THE UNIVERSALES OF AMIERICA

TO ALL, TO WHOM THESE PRESENTS SHALL COME;

North Carolina Agricultural Research Service

Wilherens, there has been presented to the

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF SEVENTERN YEARS FROM THE DATE OF THIS GRANT, SUBJECT OF THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCEPTION IT, OR EXPORTING IT, OR OFFERING IT FOR SALE, OR REPRODUCING IT, LING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT EREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT.

TED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS ERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

PEANUTS

'NC 7'

In Lestimony Whereof, I have hereunlo selmy hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 16th day of October in the year of our Lord one thousand nine hundred and eighty.

Allest

Commissioner
Plant Variety Protection Office

UNITED STATES DEPARTME AGRICULTURAL MARI	CETING SERVICE			FORM APPROVED				
APPLICATION FOR PLANT VARIE	OMB NO. 40-R3822 No certificate for plant variety protection may be issued unless a completed application form							
1a. TEMPORARY DESIGNATION OF	1b. VARIETY NAM	Ē	has been received (5 U.S.C. 553). FOR OFFICIAL USE ONLY					
NC 17209	NC 7		7900104					
2. KIND NAME	3. GENUS AND SPECIES NAME		FILING DATE	TIME A.M				
Peanuts 	Arachis hyp	ogaea L.	8-15-79 FEE RECEIVED	9:30 P.M.				
4. FAMILY NAME (BOTANICAL) Leguminosae	5. DATE OF DETERMINATION June 8, 1978		\$\frac{500.00}{250.00}	8-15-79 9-29-80				
6. NAME OF APPLICANT(S) North Carolina Agricultural Research Service	School of Ag	tand No. or R.F.D. No., Carolina State ric. and Life S leigh, NC 27650	Sciences,	8. TELEPHONE AREA CODE AND NUMBER 919-737-2718				
9. IF THE NAMED APPLICANT IS NOT A PEORGANIZATION: (Corporation, partnersh Public Institution	E NAMED APPLICANT IS NOT A PERSON, FORM OF ANIZATION: (Corporation, partnership, association, etc.) 10. IF INCORPORATED, GIVE STATE AND 11. DATE OF INCORPORATION PORATION 10. IF INCORPORATION PORATION							
12. NAME AND MAILING ADDRESS OF APP	THE THE PROPERTY OF THE PROPER							
R. W. McMillen, Manager, N State College Station, Ra	. C. Foundatio	n Seed Producer 50	rs, Inc., P. 0.	Box 5687,				
13. CHECK BOX BELOW FOR EACH ATTACH	IMENT SUBMITTED:		:					
X 13A. Exhibit A, Origin and Bree	eding History of the	Variety (See Section 5	i2 of the Plant Variety	Protection Act.)				
13B. Exhibit B, Novelty Statem	ent.							
13C. Exhibit C, Objective Descr	iption of the Variety	(Request form from	Plant Variety Protect	ion Office.)				
X 13D. Exhibit D, Additional Des	cription of the Varie	ty.						
14a. DOES THE APPLICANT(S) SPECIFY THA SEED? (See Section 83(a). (If "Yes," answer	TSEED OF THIS VAR er 14B and 14C below.)	ETY BE SOLD BY VAF	RIETY NAME ONLY AS NO	A CLASS OF CERTIFIED				
14b. DOES THE APPLICANT(S) SPECIFY THA LIMITED AS TO NUMBER OF GENERAT	T THIS VARIETY BE	14c. IF "YES," TO 14I	B, HOW MANY GENER	ATIONS OF PRODUC-				
X YES NO		X FOUNDATION	X REGISTERED X CERTIFIED					
15a. DID THE APPLICANT(S) FILE FOR PROT name of countries and dates.)	ECTION OF THIS VAI	RIETY IN OTHER COU	NTRIES? YES	X NO (If "Yes," give				
	· ·			e te Wit				
15b. HAVE RIGHTS BEEN GRANTED THIS VA and dates.)	RIETY IN OTHER CO	UNTRIES? YES	X NO (If "Yes,"	give name of countries				
	entrophilipping (sp. 1945)	and the second of	e i Meset					
16. DOES THE APPLICANT(S) AGREE TO TH	E PUBLICATION OF H	IIS/HER (THEIR) NAMI	E(S) AND ADDRESS IN	THE OFFICIAL				
17. The applicant(s) declare(s) that a viable replenished upon request in accordance	e sample of basic seed with such regulation	d of this variety will bus as may be applicable	e furnished with the a	pplication and will be				
The undersigned applicant(s) is (are) the variety is distinct, uniform, and stable at 42 of the Plant Variety Act.	e owner(s) of this se as required in Section	xually reproduced no 141, and is entitled to	vel plant variety, and protection under the	believe(s) that the provisions of Section				
Applicant(s) is (are) informed that false	e representation here	in can jeopardize prot	tection and result in p	enalties.				
7-13-79	en e	/	، مممد د					
(BATE)	-	Symmetry (5	SIGNATURE OF APPLI	CANT)				
		•		,				

INSTRUCTIONS

GENERAL: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$500 fee (\$250 filing fee and \$250 examination fee) to U.S. Dept. of Agriculture, Agricultural Marketing Service, Livestock, Poultry, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

- Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.
- Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties:

 (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.
- Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as, plant habit, plant color, disease resistance, etc.
- If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "NO," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)
- See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.

EXHIBIT A

ORIGIN AND BREEDING HISTORY OF 'NC 7'

'NC 7' is a large-seeded Virginia-type peanut (<u>Arachis hypogaea</u> L.) cultivar selected as a single plant in the fourth generation following a cross of 'Fla 393' and 'NC 5'. The female parent, Fla 393, was selected from the cross of 'F 334A-3-5-5-1' x 'Jenkins Jumbo'. F 334A-3-5-5-1 resulted from the cross of Ga 207-3 x F 230-118-2-2. The parents of the F 230 cross were Fla. Small Sh. Spanish 3X-2 and Dixie Giant. The parents of the Ga 207 cross were Basse x Spanish 18-38. NC 5, the male parent, resulted from the cross of C 12 x A 18. The pedigree of these lines was as follows:

 $C 12 = NC Bunch \times PI 121067$

A $18 = NC 4 \times Spanish 2B$

The cross was made in 1966. The first three generations were grown in the greenhouse using the single seed descent breeding method. Seed from a single plant in the fourth generation were bulked and tested as NC 17209. NC 7 was released in the fourteenth generation. Since NC 7 is a pure line, it is a uniform and stable cultivar. Uniformity is maintained by removal of any off-type plant during the production of breeders' seed.

EXHIBIT B NOVELTY STATEMENT

'NC 7' is a unique peanut (<u>Arachis hypogaea</u> L.) cultivar. Plants of NC 7 are more similar to plants of the cultivar 'NC 5' than any other peanut cultivar. including general appearance and growth habit. Plants of both cultivars have small leaves, short main stem and short cotyledonary laterals giving rise to a semi-runner growth habit. Leaves of NC 7 average 5.78 ± 0.356 cm in length and 2.36 ± 0.182 cm in width. The main stem length of NC 7 is 33.4 ± 4.3 cm, and the laterals average 53.9 ± 4.3 cm.

The main distinguishing differences between NC 7 and NC 5 are the larger pods and seeds of NC 7. Fancy-sized pods (in-shell peanuts that ride a 34/64-in. spacing of USDA presizer) for NC 7 is 83% compared to 64% for NC 5, while extra large kernels (kernels which ride a 21.5/64 x 1-in. screen) average 66% for NC 7 and 39% for NC 5 (Appendix 1, Exhibit B). The differences are based on two years, two locations and three replications and are significant at the 5% level. The average weight (g) over three years of a 100-seed sample was 81 for NC 5 and 101.5 for NC 7. This is also significant at the 5% level.

NC 7 has been observed to mature up to 20 days earlier than NC 5 in field studies conducted over six years in North Carolina and Virginia. The earlier maturity is reflected in higher yield performance of NC 7 at early digging dates. NC 7 also has moderate resistance to the southern corn rootworm (Diabrotica undecimpunctata howardi Barber) while NC 5 is susceptible. NC 7 averages approximately 50% less damage than NC 5 in field evaluations in North Carolina.

APPENDIX 1, EXHIBIT B

Two-Year Comparison of Fancy-Size Pods and Extra-Large Kernels of NC 7 and NC 5 (1975-1976 Virginia-North Carolina Peanut Variety and Quality Evaluation Program)

•	% Fancy-s	ized pods	% Extra-large kernels				
Variety	1975 Digging 1 2	1976 Digging 1 2	19	75 ging 2	19		
NC 7	76a ¹ 74a	93a 91a	57a	58a	58a	59a	
NC 5	58b 55b	68b 65b	35b	37b	33b	35b	

¹Each mean is an average of four locations (two locations/year) with three replications per location. Means with different letters within digging dates are significantly different at the 5% level according to Duncan's new multiple range test.

FORM GR-470-29 (6-17-74)

UNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE GRAIN DIVISION HYATTSVILLE, MARYLAND 20782

OBJECTIVE DESCRIPTION OF VARIET PEANUT (Arachis hypogaea)	Υ	67 16
Name of Applicants North Carolina Agricultural Research Service	VARIETY NAME OR TEMPORARY DESIGNATION	
ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)	NC 7	. :
North Carolina State University School of Agriculture and Life Sciences	FOR OFFICIAL USE ONLY	
Box 5847 Raleigh, NC 27650	7900104	
Place the appropriate number that describes the varietal character of this variety in the	ne hovee helow.	
Place a zero in first box (e.g. 0 8 9 or 0 9) when number is either 99 or less of 1. BOTANICAL TYPE:	or 9 or less.	
Flowering on the Main Stem: 1 = ABSENT 2 = PRESENT		
1 = ALTERNATE — Pairs of vegetative & reproductive branches (Virgi Branching Pattern: 2 = SEQUENTIAL — Continuous reproductive branches (Valencia—Spa	nia) 3 = OTHER (Specify) unish)	
2. PLANT:		
Habit: 1 = PROSTRATE (Florunner) 2 = DECUMBENT (NC-5) 3 = SEMI-ERECT (Florispan) 4 = ERECT (Starr) 3 = SEMI-ERECT (Florispan) 4 = ERECT (Starr)	= SPARSE (Valencia) 2 = MODER. 3 = PROFUSE (Florunner)	ATE (Starr)
3. MATURITY:		
Region: 1=VIRGINIA, NORTH CAROLINA 2 = S.E. UNITED STATES 3=S.	W.UNITED STATES 4=OTHER	:, .
1 4 0 NUMBER OF DAYS TO MATURITY		
1 0 NO. OF DAYS EARLIER THAN	2 = FLORUNNER 3 = FLORIGIAN 61R 5 = NC - 2	I T
0 5 NO. OF DAYS LATER THAN	7 = SOUTHEASTERN RUNNER 56-15 pecify) NC 17	
4. LEAVES:		,
2 COLOR AT 60 DAYS: (Nickerson Color Designation): 1 = LIGHT GREEN (10Gy 6 3 = DARK GREEN (5G 4/7)	, , , , , , , , , , , , , , , , , , , ,	
5 8 MM. LEAFLET LENGTH (Basal leaflet of the youngest fully opened leaf)	er en	
2 4 5 LEAFLET LENGTH/WIDTH RATIO	e president de la companya (n. 1865). O granda de la companya (n. 1865).	
5. POD: (Average for 20 pods at maturity)		
MM. LENGTH	eringen in der state in gestigte in der state in der stat	•
3 9 3 7 KG./HA. POD YIELD		
0 0 2 % LESS THAN	2 = FLORUNNER 3 = FLORIGIAN	т
0 1 5 % MORE THAN	61R	
B = OTHER (Sp	ecify)	
8 5 % FANCY SIZE: (% riding 13.46 mm., 34/64 inch, spacing set on presizer roller)		

<u> </u>									
5. POD (Average for 2	O pods at maturi	८ ५५ हुन्छ <u>मिल्ल स्ट्रीटर हो</u> ty):	The state of the same		(A. 1947)				
	F SEEDS PER PO	- Till	3=3	4.= 3-4	5 = 2-3-4	the second second second second			
Z	- 52255121111	· · · · ·					er vita tipi		
CONSTRIC	TION: 1 = SHAI	LLOW OR NONE(Virgin	ia 56R. Argen	itine l	2 = MEDIUN	Λ (Virginia 61R)	3 = DE	EP (Starr)	
CONSTINU	1 - 0,174		5 01() 11.go	,				•	
SURFACE: 1 = GLABROUS (Florunner) 2 = PUBESCENT (Florispan)									
BEAK:	::1 = ABSI	ENT 2 = 11	NCONSPICUO	us	3 = PRONOI	UNCED	. *.		
6. SEED (Mature, cure	ed but not aged):								
1 = WHITE (Pearl) 2 = CREAM 3 = TAN (Starr) 4 = BROWN 5 = PINK (Florigiant) COAT COLOR: 6 = RED 7 = PURPLE 8 = DARK PURPLE 9 = VARIGATED 10 = OTHER (Specify)									
2 COAT SURF	FACE: 1 = S	MOOTH 2 = INDE	INTED	1	1 = UNIFORM	COLOR 2	= BLEMISH	IED.	
1.5	SPHERIODAL	(Starr) 2 = SHO	RT-BROAD (Florunner)	3 = ELOI	NGATED-SLEND	DER (Dixie	Runner)	*
		L-TAPERED ENDS				C-2) 6 = 0	THER (Spe	cify)	
			. :	1.		and the second		11-11-11-11	1 - 2 - 1 - 1 · ·
MM. LEN	ібтн [MM. WIDTH	9	1	GRAMS PER 10	00 SEED (8% Mo	isture)	and the state of	
7. DISEASE RESISTA	NCE: (O = Not	Tested, 1 = Susceptible,	2 = Resistant)	A CONTRACTOR OF THE STATE OF TH	entre production of the second	al an and the second second	and the second	
1-1			·			•:			
SOUTHERN	STEM ROT	· · ·		UR	JST	SANDARYALSE.	1 ki ora Pilania.	water at the	. •
T EARLY LEAF SPOT									
0 SOUTHERN	LEAF SPOT		•	0 м	OSAIC				*
1 POD ROT C	OMPLEX	ing Siere Marie en 1990. George		$\overline{\square}$ \circ	THER (Specify) _				
O INICECT DECICEDA	ICE: (0 = Not-T	ested, 1 = Susceptible, 2	= Resistant)	<u> </u>		ing surprises the service	27.5.5		
d. INSECT RESISTAL	102. (0 - 1101)	ostcu, i			•				
1 THRIPS		and the second s	an ann an taonaig a staige is se	0 B(JRROWING BUG	garan arang sanggaran kan	Acres and	and a supplier of the	, 14
	17. s - 13.0 s ER	alen Koljenski.		NI NI	EMATODE (Spec	ify species)	general School	6 1	19/10
							01		
2 SOUTHERN	COBN ROOTW	Ż u ś	a service of the	0 "	ESSER CORNSTA	20 20 10 10 10 10 10 10 10 10 10 10 10 10 10	and the second		
OTHER (Specify)									
9. COMPARISON OF SUBMITTED VARIETY WITH ONE OR MORE SIMILAR VARIETIES:									
VARIETY	OIL*	PROTEIN*	OLE LINOL ACID R	IC: * LEIC ATIO	IODINE*	SHELLING (%)	SMK** (%)	ELK+.	MAIN STEM HEIGHT (CM)
SUBMITTED	47.3	30.4			90.7	76	74	56	33
SIMILAR	48.1	30.9			95.9	73	70	33	35
NAME OF SIMILAR VARIETY	Florigian	t Florigiant	A Property of the Control of the Con		Florigiant +				giant
*From Sound Mature Kernels + Extra Large Kernels + Extra Large Kernels									
10. INDICATE A VARIETY WHICH MOST CLOSELY RESEMBLES THAT SUBMITTED:									
CHARACT		VARIETY			CHARACTER		VAI	RIETY	
POD COLOR	Florigiant		SEEDLING VIGOR			NC 6			
SEED DORMANCY Florigiant HULL THICKNESS NC 2					<u> </u>				
SEED SIZE NC 17 LEAF COLOR Florigiant 11. COMMENTS (Additional description or clarification — Such as: Relative disease reactions may be compared with standard varieties)									
11. COMMENTS (Ad	ditional descripti	on or clarification — Su	ch as: Relativ	e disease r	eactions may be	compared with st	andard vari	eties)	Committee Contract

<u>EXHIBIT D</u> ADDITIONAL DESCRIPTION OF THE VARIETY

Peanuts of 'NC 7' have a lower iodine value and a better storability than peanuts of either 'NC 5' or 'Florigiant'.

NC 7 produced a slightly higher mill outturn than Florigiant when farmer stock peanuts were shelled. NC 7 produced considerably more extra large kernels and fewer No. 1 size kernels than Florigiant. NC 7 averaged 16.8% jumbo pods compared to 11.2% for Florigiant.

Flavor scores based on test panel evaluations were similar for NC 7 and Florigiant. The processing quality of raw extra large and medium grade kernels for both NC 7 and Florigiant was also similar except kernels of Florigiant blanched easier and split less during blanching than NC 7. Both NC 7 and Florigiant blanched easier than NC 5.

The No. 1 and No. 2 grade peanuts of both NC 7 and Florigiant processed satisfactorily for peanut butter. Both cultivars gave USDA grade A peanut butter with similar characteristics.

Seed Regulatory and Testing Branch Livestock and Seed Division Building 506, BARC-East Beltsville, Maryland 20705 (301)503-9356

In reply refer to: FSA 94-0441

JUL 1 8 1994

The Clint Williams Company Post Office Box 310 Madill, Oklahoma 73446-0310

Gentlemen:

We have information that on or about April 13, 1994, you sold, by variety name, uncertified seed of the NC7 variety of peanut.

NC7 is a variety protected under the Plant Variety Protection Act. The certificate of Plant Variety Protection for this variety indicates that the seed shall not be sold by variety name unless it is certified seed. Under Federal law, Title V of the Federal Seed Act, it is illegal to sell or offer for sale or advertise NC7 peanut seed by variety name unless the seed is certified.

This warning is issued under Section 412 of the FSA which provides that in certain circumstances a suitable warning may be issued instead of other action. A copy of the FSA and regulations is enclosed.

In addition to complying with the Federal Seed Act, persons handling seed of any protected variety are urged to exercise care to avoid infringing rights granted under Section III of the Plant Variety Protection Act.

Sincerely,

L.D. Dreyer Seed Marketing Specialist

Enclosures

bcc: C. Leamons (TX lab. No. 93-94-0885-LI)
M. Waymack (TX)
M. Vandeventer (OK)

K. Evans (PVPO)

Action is limited to a warning since this is our first record of violation of the FSA by this company.

Seed Regulatory and Testing Branch Livestock and Seed Division Building 506, BARC-East Beltsville, Maryland 20705 (301) 344-4430

1 6 MAR 1990

Williston Peanuts, Inc. Post Office Box 606 Williston, Florida 32696 In reply refer to: FSA 89-0907

Gentlemen:

We have information that on April 7, 1989, you sold, by variety name, uncertified seed of the NC-7 variety of peanut.

NC-7 is a variety protected under the Plant Variety Protection Act. The certificate of Plant Variety Protection for this variety indicates that the seed shall not be sold by variety name unless it is certified seed. Under Federal law, Title V of the Federal Seed Act, it is illegal to sell or offer for sale or advertise NC-7 peanut seed by variety name unless the seed is certified.

This warning is issued under Section 412 of the Federal Seed Act which provides that in certain circumstances a suitable warning may be issued instead of other action.

In addition to complying with the Federal Seed Act, persons handling seed of any protected variety are urged to exercise care to avoid infringing rights granted under Section III of the Plant Variety Protection Act.

Sincerely,

L.D. Dreyer Seed Marketing Specialist

Enclosure

bcc: W. Pace (FL)
W. Vaughan (FL)

K. Evans (PVPO)

bcc: This is our first record of violation of the Federal Seed Act by this shipper.